



PCT
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Docket No.: 13111-00003-US
(PATENT)

#3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Ralf Flachmann et al.

Application No.: 10/524990

Confirmation No.: N/A

Filed: February 18, 2005

Art Unit: N/A

For: PROCESS FOR THE HYDROLYSIS OF
CAROTENOID ESTERS

Examiner: Not Yet Assigned

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

Of the documents listed on the attached SB/08 are the patent documents cited in the International Search Report during the prosecution of international application No. PCT/EP03/09218, which corresponds to the above referenced application, and in accordance with 37 CFR 1.97(b)(3), Applicants hereby submit these documents for the Examiner's consideration. Other documents listed on the attached SB/08 Form are cited in the specification of the above referenced application. A copy of each reference is attached.

This statement is not to be interpreted as a representation that the cited documents are material, that a search has been conducted, or that no other relevant information exists. Nor shall the citation of any document herein be construed *per se* as a representation that such document is prior art. Moreover, Applicants understand the Examiner will make an independent evaluation of the cited documents.

This Information Disclosure Statement is being submitted before the first Office Action on the merits; accordingly, Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13111-00003-US from which the undersigned is authorized to draw.

Dated: June 13, 2005

Respectfully submitted,

By 

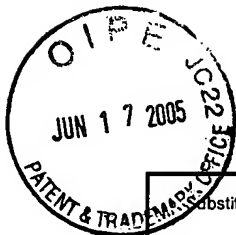
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Attorneys for Applicant

401097_1/RGM/HW



PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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				Application Number	10/524990
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Filing Date	February 18, 2005
				First Named Inventor	Ralf Flachmann
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	13111-00003-US
Sheet	1	of	2		

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	BA	EP-1 398 373 A1	03-17-2004	The Procter & Gamble Company		✓
	BB	WO-02/094982 A2	11-28-2002	Agricultural Research Organization, The Volcani Center		✓
	BC	DE-102 58 971 A1	01-07-2004	SunGene GmbH & Co. KGaA		✓

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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	CA	Zorn, H. et al. "Enzymatic hydrolysis of carotenoid esters of marigold flowers (<i>Tagetes erecta</i> L.) and red paprika (<i>Capsicum annuum</i> L.) by commercial lipases and <i>Pleurotus sapidus</i> extracellular lipase." Enzyme and Microbial Technology. (April 8, 2003) Vol. 32, pp. 623-628, XP002971542.		
	CB	Breithaupt D.E. "Enzymatic hydrolysis of carotenoid fatty acid esters of red pepper (<i>Capsicum annuum</i> L.) by a lipase from <i>Candida rugosa</i> ." Zeitschrift fur Naturforschung. C, A Journal of Biosciences. (2000) Vol. 55, No. 11-1, pp. 971-975, XP008013161.		
	CC	Breithaupt, D. E. et al. "Carotenol fatty acid esters: easy substrates for digestive enzymes?" Comparative Biochemistry and Physiology, Part B. (August 2002) Vol. 132 B, No. 4, pp. 721-728, XP001188945.		
	CD	Aakermann T. et al. "Enzymatic hydrolysis of esters of alkali labile carotenols." Biocatalysis and Biotransformation. (1996) Vol. 13, pp. 157-163, XP008029126.		
	CE	Jacobs P. B. et al. "The cleavage of carotenoid esters by cholesterol esterase." Comp. Biochem. Physiol. (1982) Vol. 72B, pp. 157-160, XP008029124.		
	CF	Mann, V. et al. "Metabolic engineering of astaxanthin production in tobacco flowers." Nature Biotechnology. (August 2000) Vol. 18, No. 8, pp. 888-892.		
	CG	Liu Y. et al. "Enzymatic hydrolysis, extraction, and quantitation of retinol and major carotenoids in mature human milk." Journal of Nutritional Biochemistry. (March 1998) Vol. 9, pp. 178-183.		
	CH	Lichtenthaler H. K. "Chlorophylls and carotenoids: pigments of photosynthetic biomembranes." Methods in Enzymology. (1987) Vol. 148, pp. 350-382.		
	CI	Murashige T. et al. "A revised medium for rapid growth and bio assays with tobacco tissue cultures." Physiologia Plantarum. (1962) Vol 15, pp. 473-497.		
	CJ	Patek M. et al. "Leucine synthesis in <i>Corynebacterium glutamicum</i> : enzyme activities,		

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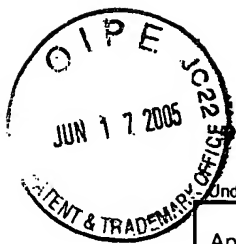
Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/524990
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Sheet	2	of	2	Attorney Docket Number	13111-00003-US

		structure of <i>leuA</i> , and effect of <i>leuA</i> inactivation on lysine synthesis." Applied and Environmental Microbiology. (January 1994) Vol. 60, No. 1, pp. 133-140.	
	CK	Malakhova I. I. et al. "Thin-layer chromatography of free amino acids. Selection of conditions for the separation of L-lysine, L-homoserine, and L-threonine." Russian Biotechnology. (1996) Vol. 11, pp. 26-31.	
	CL	Schmidt S. et al. "Near infrared spectroscopy in fermentation and quality control for amino acid production." Bioprocess Engineering. (1998) Vol. 19, pp. 67-70.	

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